

ENVIRONMENTAL FLOWS ON THE GLENELG FREQUENTLY ASKED QUESTIONS

What are environmental flows?

Environmental flows are the flows that are released to improve the health of our rivers and wetlands. In the Glenelg River, they are releases of water from Rocklands Reservoir to improve the health of the Glenelg River and the plants and animals that live there.

Why do we need environmental flows now, when we didn't in the past?

Rocklands Reservoir has more than halved the flows in the Glenelg River since it was constructed, which has had a major impact on its health. Environmental flows from Rocklands Reservoir into the Glenelg River gives a proportion of this lost water back to the river, improving the health of the river and the plants and animals that live there.

When did environmental flows on the Glenelg start?

The poor state of the upper Glenelg River during the millennial drought showed communities along the river the result of so much water being diverted from the river. During this period, the river was in a poor condition, with much of the upper reaches reduced to shallow, saline pools. In 2009, it was decided to use the water savings created by the replacement of the inefficient channel system with the Wimmera Mallee Pipeline to establish environmental flows in the Glenelg River.

Where does the water come from for environmental flows?

Water that is released into the Glenelg River comes from Rocklands Reservoir. Releasing water for the environment is a way to give some of the water held in Rocklands back to the river that it would have flowed down before the construction of the reservoir wall at Rocklands.

How much water is released into the Glenelg River as environmental flows every year?

Every year the Victorian Environmental Water Holder (VEWH) allocates a certain amount of water to be released into the Glenelg River as environmental flows. The amount of water allocated for environmental releases, depends on seasonal conditions, water availability, and the health of the river as determined by ongoing scientific monitoring. As the year progresses, scientists at the Glenelg Hopkins CMA release this water according to how the river is faring, weather and the requirements of plants and animals living in and along the river.

The amount of environmental flows released from Rocklands Reservoir to the Glenelg River since 2009 has varied from 3000 megalitres in the dry year 2015-16 to 31,000 megalitres following a series of wet years 2012-2015.

How do you decide when to release water?

In deciding when to release environmental flows we consider many factors including: the needs of plants or animals in the river, recent natural flows, water quality, weather forecasts

and people using the river and their needs. As well as reviewing the scientific information on the river, we contact landholders in the upper reaches of the river to discuss their observations of the condition of the river. We consider all this information to determine how the river is faring and help us decide the best time to release environmental water for the best outcome.

Do the carp screens at Rocklands really work?

Absolutely. Carp screens are placed over the outlet from Rocklands Reservoir into the Glenelg River. The carp screens are fitted with mesh that is small enough to prevent carp and their eggs passing through into the Glenelg River from Rocklands Reservoir as part of environmental water releases. The screens are netted for fish twice a week with all native fish returned to the reservoir while carp are culled.

How are you monitoring carp in the river?

The Glenelg Hopkins CMA monitor carp numbers in the Glenelg River as part of a carp management project called the Judas Carp Project. Scientists insert radio trackers into individual carp which are then released back into the river. As carp are schooling fish, project officers can locate schools of carp using the radio trackers and eradicate them using electrofishing techniques.

Why do you let water go in summer? Shouldn't the river be dry over summer?

The Glenelg River has changed considerably over the past 100 years. Waterholes in the upper Glenelg are much shallower, the flow has decreased making the river dry for longer and the river has become saltier. As a result, waterholes left behind are no longer deep or fresh enough to sustain fish populations through the height of summer and farmers wanting to use the river water for stock watering over summer were finding it too salty for stock use. Summer water releases add oxygen-rich water to the river and flush out salts, helping fish and animals that live in the river survive and making river water suitable for stock watering.

What are passing flows? Why are they needed?

Passing flows are a proportion of winter inflows to Rocklands released into the Glenelg River between July and the end of November. Passing flows aim to give the upper parts of the Glenelg River some of the higher winter flows they miss out on, as there are limited inflows from tributaries in the upper sections of the river. All flows from Rocklands into the Glenelg River, including passing flows, are ceased during flood periods.

Why is there so much cumbungi in the river? Is this due to environmental flows?

No, cumbungi took hold in the Glenelg River during the millennium drought when flows were low. Environmental water releases are increasing flows in the river, so if anything, overtime they are likely to reduce cumbungi.

Why have they changed what level is considered full at Rocklands over the past five years?

In 2014, GWMWater changed the maximum operating level to 85% of Rocklands full capacity as filling beyond that point dramatically increases evaporation rates. When reservoir levels are quoted as a percentage full, this is a percentage of the maximum operating level, not the full physical capacity.

Why do you let water go during wet times?

The natural flow of our rivers in southern Australia is higher in winter and lower in summer. Before Rocklands Reservoir was built, annual high winter flows occurred naturally every winter throughout the river. Now that much of the water that would have gone down the Glenelg is held in Rocklands Reservoir, some of this water is released so plants and animals can experience some of the high flows they require for their lifecycle. This lack of winter flow is particularly an issue in the upper part of the river directly downstream of Rocklands Reservoir as it doesn't have the tributaries supplying winter flows that the lower catchment has.

Why not save water releases for dry times?

The reality is evaporation rates are so high from Rocklands that much of the water left in Rocklands will be lost to evaporation. For instance, over the last 7 years between 16,000 and 36,000 megalitres was lost to evaporation from Rocklands every year, whereas environmental flows have used between 3000 to 31,000 megalitres every year over the same period. Given this, careful consideration is given to balancing water use and water savings.

How can you look after the river if you don't actually live on the river?

There has been a lot of science over the last 10 to 20 years around releasing water for the environment to help us determine what flows need to be provided to keep the river healthy and maintain plant and animal populations in the river. Our staff managing environmental flows are highly experienced ecologists that have worked on the Glenelg River for many years. Information about the river's flow and water quality is continuously transmitted to staff which gives them an overview of how the river is going at different sites along the river. As well as speaking to farmers living along the river as to its condition, conducting regular on site visits our staff receive advice from the Glenelg Hopkins CMA Environmental Water Advisory Group made up of landholders, townspeople and anglers as to how best to manage water releases.

How can I have my say on environmental water?

The Glenelg Hopkins CMA is always keen to hear feedback from people living on the river about what aspects of enviro flow are working well but also as to how environmental flows management can be improved. Feel free to send your enquiries to email address planning@ghcma.vic.gov.au .

How can I find out about Rocklands Reservoirs water levels?

Although Glenelg Hopkins CMA do play a role in deciding when and how much water to release into the Glenelg River, Rocklands is managed by GWMWater. See their website www.storagemanager.com.au for details of Rocklands water levels.

How can I make sure I know when environmental flows are happening?

Glenelg Hopkins CMA offers a SMS alert service, which sends text messages to tell you when environmental flows happening, flow rates and when the flow is likely to reach your section of the river. You can subscribe to this service by emailing planning@ghcma.vic.gov.au .

What are the benefits of environmental flows?

Monitoring by scientists from Glenelg Hopkins CMA has shown river health to improve significantly since the commencement of environmental water flows in 2009. Environmental flows improve water quality, reduce salinity, increase connectivity in the river allowing for fish migration, help native plants in the river and on the river banks regenerate and trigger fish breeding events. Improved health of the river benefits everyone that uses the river: the animals and plant that live there, farmers accessing the river for stock and domestic purposes and people using the river for recreational activities such as fishing, swimming or canoeing the river.

How do I find out more?

Find more resources on environmental flows:

- at our website www.ghcma.vic.gov.au
- at the Victorian Environmental Water Holder website www.vewh.vic.gov.au

To find out more about Rocklands Reservoir visit www.storagemanager.com.au